## RATIO CALCULATIONS AND SHUTDOWN SUMMARY APRIL 2009

## MIDCO I AND II SITES GARY, INDIANA

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Parameter	Units	Midco I Site	Midco II Site	Deep Well Site
HP/UV flow rate <sup>1</sup>	gpm	21 to 37	50.6 to 60	
HP/UV operating lamps	count	2	5	
UV tube cleaning cycle	hours	2.0	5.0	
Hydrogen peroxide feed	ppm	325	120	
pH, inlet to HP/UV unit	pH units	7.3	7.1	
Extraction well flow rates as of 4-30-09				
EW-1	gpm	9.0	4.0	
EW-2	gpm	9.0	7.0	
EW-3	gpm	4.0	10.0	
EW-4	gpm	2.0	8.2	The manager over a search of the series of
EW-5	gpm	4.0	N/A	
EW-6	gpm	2.0	5.2	SELECTION OF STREET SERVICES OF SELECTION OF
EW-7	gpm	9.0	4.2	
MW-3D	gpm	OFF	N/A	
MW-5D	gpm	OFF	N/A	
MW-6D	gpin	4.0	N/A	
Extraction well flow rates necessary for capture <sup>2</sup>	<u> </u>			and or experience of the light of the
EW-1	anm	6.4	13.0	
EW-2	gpm	6.4	13.0	
EW-3	gpm	N/A	16.9	
EW-4	gpm	1.0	8.0	
EW-5	gpm	N/A	N/A	
EW-6	gpm	1.7	5.7	
EW-7	gpm	6.4	9.1	
Range of detections from field gas chromatograph	gpm	6.4	9.1	
Methylene chloride	=/T	< 5.0	N/A	
Vinyl chloride	μg/L μg/L	< 2.0	N/A N/A	
Treatment operating flow rate less tube cleaning		31.4 to 36.3	49.8 to 59.7	
Total treated water volume <sup>3</sup>	gpm galions	1,265,425	1,478,875	- 2,744,300 -
Design average flow rate <sup>4</sup>	gpm	28.0	50.6	78.6
Month duration and operating time for average monthly flow rate calculation	days	30	30	
	minutes	43,200	43,200	
Non-GWETS-related shutdowns (pages 2 & 3)	minutes	520	1,006	
Annulus & pipeline testing shutdowns	minutes	0	0	
Operating time for average monthly operating flow rate calculation	minutes	42,680	42,194	
GWETS-related shutdown - scheduled & non-scheduled (see pages 2 and 3)	minutes	2,054	1,205	
Operation time excluding all shutdowns	minutes	40,626	40,989	
Average monthly operating flow rate <sup>5</sup>	gpm	29.6	35.0	- 64.7
% average monthly operating flow rate to design average flow rate	%	105.9%	69.3%	82.3%
Average monthly flow rate <sup>6</sup>	gpm	29.3	34.2	63.5
% average monthly flow rate to design average flow rate	%	104.6%	67.7%	80.8%
Waste materials stored on-site for off-site disposal			011,770	00,070
Spent filters	cubic yards	18	2	
Anticipated off-site shipment week of	1 1 2 2 2 3 1 1 1 2 3	May 8, 2009	May 18, 2009	
Waste shipments this month		None	April 1, 2009	
Filter cake	cubic yards	N/A	10	
Anticipated off-site shipment week of	- January Garana	N/A	August 17, 2009	
Waste shipments this month		N/A	None	
Other wastes (specify):	1	None	None	
Anticipated off-site shipment week of	_1	N/A	N/A	
Waste shipments this month		None	None	
Kev:	***************************************	MULIC	None	

## Key:

HP/UV = Hydrogen peroxide/ultraviolet light

GWETS = Ground water extraction and treatment system

gpm = Galions per minute

 $\mu g/L = Micrograms per liter$ 

N/A = Not applicable

## Notes:

- <sup>1</sup> HP/UV flow rate is the process water flow rate that goes through the HP/UV.
- <sup>2</sup> Extraction wells EW-3 and EW-5 at the Midco I Site are used for dewatering purposes only.
- $^{3}$  Total treated water volume is obtained from the site treated water flow totalizer.
- <sup>4</sup> Design average flow rate is the model-predicted flow rates of 21.0 or 50.6 gpm, respectively for the Midco I and Midco II Sites. The design average flow rates changed on February 24, 2003 from 24.5 to 50.6 gpm for Midco II. The Midco I design average flow rate varies between 21 and 28 gpm, based on dewatering.
- <sup>5</sup> Average monthly operating flow rate is the total treated water volume divided by the operating time excluding all non-GWETS-related shutdowns. This value is different from the HP/UV flow rate because of the flow recycled during the tube cleaning.
- <sup>6</sup> Average monthly flow rate is the totalized volume of treated water divided by the number of minutes for that month.